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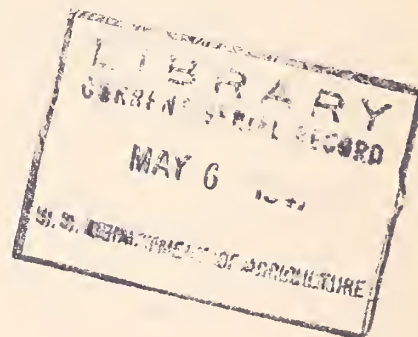
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**FUTURE PROSPECTS FOR
AMERICAN COTTON
IN CZECHOSLOVAKIA**

by

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This report is based on a personal survey made by Mr. Taylor, United States Agricultural Commissioner, American Embassy, London, England.

FUTURE PROSPECTS FOR AMERICAN COTTON IN CZECHOSLOVAKIA

SUMMARY

On July 31, 1938, the Czechoslovak Cotton Spinners' Association reported a total of 3,330,000 cotton spindles, but on January 31, 1939, after the Sudetenland had been ceded to Germany, it reported only 1,558,000 spindles. About one-third of the spindles in place in 1938 were estimated to have been destroyed, or moved away by the Germans in order to provide factory space for the manufacture of war supplies, and of the remainder only about 75 percent were in operating condition at the end of 1946. It was expected that 1,500,000 would be in operation in January 1947, and a total of 2,300,000 by October 1948. Weaving capacity is more than sufficient to absorb all available supplies of yarn.

According to reports, the consumption of cotton from liberation in May 1945 to August 1, 1946, was about 143,500 bales. The goals of consumption are 234,000 bales for 1946-47, 361,000 bales for 1947-48, and 430,000 bales for 1948-49. These goals call for a rate of consumption per spindle considerably higher than during the 7 years 1932-38. To attain them, serious handicaps will have to be overcome.

Russia supplied about one-third of all cotton used from the end of the war to August 1, 1946, and UNRRA supplied 60 percent. It has been difficult to get estimates of supplies which may be obtained from Russia in the future.

The population of Czechoslovakia has declined from a prewar total of about 15,000,000 to 13,791,000. This reduction, due in part to the deportation of Germans, has created a difficult labor problem. Reports state that the total available labor is reduced by 30 percent and that efficiency of labor has declined by about one-third. Nationalization has also apparently increased the relative percentage of white-collar workers. This labor shortage seems likely to delay realization of the textile-production plan for 1947-48.

The textile machinery in Czechoslovakia is about 70 percent British, 25 percent German, and 5 percent American in origin. Only looms, minor equipment, and spare parts have been produced locally. Imports of new equipment from abroad may be long delayed because of a large backlog of orders from all textile centers. Automatic looms are now being produced in Czechoslovakia.

The nationalization authorities have given much thought to the coal situation in an effort to provide coal for export. Domestic needs will be adequately covered. However, production has not increased since January 1946 because of labor shortages. The quantities exported have been small.

Since Czechoslovakia was occupied by the Germans without severe military damage, transportation facilities are relatively better than in many other countries of Europe. There is some shortage of locomotives and freight cars, but in general the movement of goods is not hampered too seriously.

Since liberation, it has been Czechoslovakia's national policy to change from capitalism to statism. Industrial firms employing more than 400 workers have been taken over. This involves about 61 percent of all workers in spinning mills but a much smaller proportion in weaving establishments.

The prewar volume of synthetic-fiber production was relatively unimportant. Present production is less than 5,000 metric tons per annum, or say the equivalent of not more than about 25,000 bales of cotton. The 2-year plan for 1947 and 1948 envisages a production of 25,000 to 30,000 tons. Such expansion would involve a large initial capital investment and the importation of costly chemicals. For these reasons, realization of the plan may be delayed.

SPINNING AND WEAVING CAPACITY

Spinning

In a complete list of individual cotton mills published in 1936 by the Czechoslovak Spinners' Association, over 90 mill units are listed, and the total number of spindles is given as about 3,486,000. Enemy removals, destruction, and obsolescence have greatly reduced the totals both of spindles and of mill units. The Ministry of Industry has stated that at least one-third of the spinning, weaving, and finishing capacity was dismantled and taken away, or scrapped by the German authorities, in 1939 and 1940, and the buildings were used for war purposes. Of the remainder, only about 75 percent can be operated. This means that present capacity is actually about 50 percent of that in 1938.

The following tabulation shows the number of spindles in operation, or to be brought into operation, as estimated by the Ministry of Industry at Prague.

<u>Date</u>	<u>Number</u>	<u>Date</u>	<u>Number</u>
August 1, 1946.....	1,253,000	January 1948.....	2,000,000
January 1947.....	1,500,000	April 1948.....	2,100,000
April 1947.....	1,600,000	July 1948.....	2,200,000
July 1947.....	1,800,000	October 1948.....	2,300,000
October 1947.....	1,900,000		

Although the number of spindles in operation in January 1947 was less than one-half the 3,330,000 spindles reported for 1938, the total is expected to reach 2,300,000 by October 1948.

Full production on these spindles is still complicated by the existence of obsolete and war-worn equipment, the return to Germany of the skilled Sudeten German textile workers, the projected removal of plants to Slovakia, and insufficient supplies of cotton of the right quality.

The annual consumption of cotton in Czechoslovakia during the 7 years 1932-38 averaged 349,000 bales, of which about 67 percent was American. The average prewar consumption of raw cotton per spindle per year in the same period was about 43 pounds. This is an exceptionally low figure, compared with other countries, and may be attributed not only to low efficiency but also to the fact that the obtainable textile trade did not keep the industry operating a full shift throughout. The Czechoslovak textile authorities are estimating that they can ultimately increase this rate of consumption to over 80 pounds per spindle per year by operating improvements all along the line. On this estimate, the monthly capacity in bales of 500 pounds gross would be as follows, based on a single shift of 48 hours weekly:

<u>Month</u>	<u>1946-47</u>	<u>1947-48</u>	<u>1948-49</u>	<u>Month</u>	<u>1946-47</u>	<u>1947-48</u>	<u>1948-49</u>
August.....	9,224	27,673	32,285	March...	23,061	32,285	-
September....	9,224	27,673	34,591	April....	25,367	32,285	-
October.....	12,914	27,673	34,591	May.....	25,367	32,285	-
November....	13,836	27,673	36,897	June.....	25,367	32,285	-
December....	16,142	29,979	36,897	July.....	<u>27,673</u>	<u>32,285</u>	-
January.....	23,061	29,979	-				
February....	23,061	29,979	-	Total..	234,296	362,053	212,158

If one assumes that consumption could continue through 1949 at the planned rate of 36,897 bales for December 1948, the industry would have the capacity to consume a total of 432,400 bales in the 1948-49 cotton year

on 2,300,000 spindles. With 3,445,000 spindles in 1937, the consumption was 441,600 bales. At 90 pounds per spindle, the 3,445,000 spindles then in place would have consumed about 648,000 bales. The most efficient mill in Czechoslovakia is now producing 20's yarn at the rate of 101.58 pounds of raw cotton per year. The Czechoslovak authorities are now basing their estimate on the ultimate production of about 85 pounds per spindle per year.

Difficulty will probably be encountered in attaining this rate of consumption throughout the industry, at least until more modern equipment can be obtained; more spindles installed; and the stabilized operations under nationalization - workers' committees, wages, raw-cotton supplies, spare parts, multiple shifts, etc. - can all be coordinated.

For the immediate future the quickest way to increase output would be to operate in multiple shifts, but there is the difficult problem of increasing the supply of trained labor. Efficiency of labor at present is believed to be considerably below normal standards.

Weaving

A large percentage of the weaving mills in Czechoslovakia are small units and have not suffered from either damage or removal to the same degree as have the spinning mills, particularly the larger units. Consequently, the number of looms is more than ample to handle the prospective supply of yarn. It is estimated that before the war about 100,000 looms were in place. The Ministry of Industry now reports 90,000 installed, of which, however, less than 5 percent are of the automatic type.

According to the Government plans, about 30,000 of the obsolete looms are to be replaced by 15,000 automatic looms, which are now being built in Czechoslovakia. This type of loom has been installed in a mill near Prague and is operating successfully at high speeds. It is planned to operate these automatic looms on double shifts.

The larger nationalized spinning units probably will be the ones to be equipped with these new automatic looms. Production may thus be concentrated in nine large combines which have been organized in accordance with the existing program. Such a policy would gradually eliminate the older looms and the smaller weaving mills.

Each weaver operates from 2 to 4 of the old looms; about 12 looms when operating old and new combined; and 24 when operating

all automatic looms. Since only those concerns employing over 400 workmen are nationalized, over 75 percent of these small weaving mills continue under private control.

RAW COTTON

The amounts of cotton imported and consumed in the period from liberation in May 1945 to August 1, 1946, and the stocks on hand on the latter date, all in bales of 480 pounds, net weight, were as follows:

<u>Kind received</u>	<u>Consumption</u>	<u>Stocks on Aug. 1, 1946</u>
Russian..... 48,566	American types..113,335	Russian.... 13,604
UNRRA (American).. 84,969	Egyptian..... 19,750	American. 13,806
Egyptian..... 4,134	Other..... 5,617	Brazilian.. 2,025
Others..... 2,195		Egyptian... 4,483
Total.....139,864	Total.....138,702	Total..... 33,918

Consumption and stocks on August 1, 1946, totaled 172,620 bales, although only 139,864 bales were reported as received. The difference is not explained.

The Russian cotton has been supplied in return for textiles. No information is available on the percentage of textiles going to Russia in exchange for cotton, but it is believed to be substantial. Part of the Russian cotton delivered to Czechoslovakia has been of Egyptian type. Samples examined show it to be badly ginned, of low grade, and irregular in staple, and on combed 60's yarn the waste was between 30 and 40 percent. In the mill where this was inspected the 60's combed yarn was uneven, nappy, and not suitable for weaving into a normal quality of combed fabric.

It has not been possible to obtain a complete statement on the current position in Czechoslovakia as to present, or prospective, supplies of raw cotton. A 2-year plan adopted in October 1946 fixes the goal for annual production of cotton and cotton-waste yarns at 58,200 metric tons in 1947 and 1948. This represents the product of about 300,000 bales of cotton in each year, a figure which is consistent with the official estimates of capacity. For the 2 years, the total quantity required is estimated by the Government at about 600,000 bales, of which about 80 percent (480,000 bales) is of the American type.

No information has been obtained as to the quantities, or kinds, of cotton that may actually be obtainable from the Soviet Union in the

future. A committee of Czechoslovak officials was reported to have been in Moscow in the late summer discussing the possibility of a new cotton agreement similar to the one made in April 1946. It is not known what was accomplished. Further discussions have since been held in Prague. Cotton supplied by the U.S.S.R. will undoubtedly be obtained on a barter basis, that is, Russian cotton for Czechoslovak textiles, machinery, etc.

At the present time the officials of Czechoslovakia say they want Middling and Strict Middling American 15/16 to 1-1/6 and Fully Good Fair Ashmouni and Karnak Egyptians. There appears to be a preference for American grades and staples, and with suitable financial arrangements the United States quite probably could supply a substantial percentage of the 350,000 bales of cotton required for 1947 and 1948. The quantities obtainable in the future either from the United States or from other countries will, however, depend upon the outcome of credit negotiation, barter, or processing arrangements.

It is estimated that the first 20-million-dollar Export-Import credit will supply about 110,000 bales. After taking account of this transaction and possible small purchases from other sources, about 350,000 bales would still be needed. Several American traders have come to Prague with the desire to purchase textiles. Czechoslovak officials have suggested that these merchants might be in a position to furnish raw cotton in exchange for the finished product. The Czechoslovak Government officials have proposed in all cases that they retain up to 50 percent of the finished product. So far as is known, no actual contracts have been consummated along these lines.

There have also been many discussions relative to "processing contracts" with other European countries. The Government will find it difficult, however, to export additional quantities of finished textiles while still obligated to exchange textiles for cotton with Russia and at the same time supply domestic needs. The Ministry of Information reported recently that -

"after deducting certain priority items such as curtains, furniture materials, hospital supplies, food processing, etc., that only one kilogram (2.2 pounds) of cotton material remained for each citizen. With respect to woollens, the quantity available is sufficient for only 1.1 meters or a little over 40 inches of cloth per capita per annum."

Actual consumption of cotton in September 1946 was reported as 64 percent of the 1948 goal. At that time it was calculated that exports would have to be doubled to provide exchange sufficient to cover the purchase of raw materials.

LABOR

Before the war the population of Czechoslovakia was about 15,000,000. A report dated January 1946 showed the following number for the three Provinces:

Bohemia.....	6,754,000
Moravia-Silesia.....	3,485,000
Slovakia.....	3,552,000
Total.....	<u>13,791,000</u>

In these three Provinces the monthly average number of workers employed in 1937 was 1,220,000, whereas on August 1, 1946, only 873,000 workers were reported, a reduction of nearly 30 percent. The number of textile workers is now reported to be only 75 percent of the prewar peacetime staff. This may not be too serious, however, since the number of available spindles has been similarly reduced. According to reliable estimates, the proportion of office workers to total workers in the nationalized industries varies from 1 to 3 or 1 to 5, whereas the prewar figure was 1 to 7. In the large nationalized factories there exists a Workers' Labor Committee, and a delegate representing the workers is consulted and approves, or concurs, in operational procedure, hours, wages, and conditions of work. Probably the most serious aspect of the postwar problem of manpower is the shortage of technicians and skilled workers.

A factor in the labor situation has been the lack of new apprentices during the war years. The reduction of the Jewish and German population also accentuates the need for the training of new workers. Efficiency of labor is considered to have decreased some 30 to 35 percent from prewar standards.

In a 2-year plan covering 1947 and 1948, set up by the Government for the national mobilization of labor (manpower), about 270,000 workers will be assigned to industry, 90,000 to building activities, and 230,000 to agriculture and forestry. Simultaneously, it is aimed to bring about an increase of workers' average efficiency by 10 percent over 1937.

According to the plan, these goals are to be attained -

"by a series of changes or policies, as follows:

1. Transfer of workers from one place to another.
2. Skilled workers returned to their original occupations.
3. Youth to be employed.
4. People not now working will be employed.
5. Number of women workers will be increased.
6. Those with reduced working abilities will be employed.
7. Return of fellow countrymen will be supported.
8. Working competition will be organized.

"If necessary, labor will be conscripted under legal regulation. It will be the responsibility of all employers to see that the transfer of workers is carried out in the most suitable way to insure a good standard of living. To employ workers with suitable and proper efficiency and the utilization of their working time, etc.

"To accomplish these things, a just arrangement of working conditions, salaries, wages and prices in all lines and professions, is essential. Foreign trade, scientific research and other organizational improvements are set forth while at the same time the nationalization of all major enterprises is going on concurrently."

Very little information has been available on the relative cost of living or wages. However, it has been reported that -

"...based on the 1939 cost of living index of 100, the August 1, 1946 index was 309 for a worker's family; for an office worker's family it was given as 285.

"In August 1946 male workers' wage index was 286.5, while that of females was 386.5, the reason being that wages for women were on a lower scale in 1939, i.e., 2.26 crowns for women compared with 3.45 per hour for men.

"The index for white collar workers is now 200 but many commodities are not obtainable at any price."

MACHINERY

The existing textile machinery in Czechoslovakia is about 70 percent British, 25 percent German, and 5 percent American. Only looms, minor equipment, and spare parts have been produced locally.

Existing equipment is for the most part out of date, and the present low machine efficiency can hardly be raised until new spinning equipment replaces the old. Since almost every other country is in the market for new equipment, it is not likely that modernization in Czechoslovakia can be accomplished for some years to come.

COAL

Coal supplies bear a very important relationship to textile production, since practically all textile mills are in daily need of coal. Approximately 50 percent of the cotton mills, according to estimates, are operated by electric power, and about 50 percent by steam; but, in all cases, coal is also required for winter heat and for certain processes in the spinning or weaving mills, such as starching or sizing the warp yarn. Bleaching, dyeing, and finishing processes are also in daily need of coal. An official of the textile industry group believes that there will be sufficient coal to maintain full production in the cotton mills.

Because coal is one of the most important factors in the domestic and industrial recovery of the country, the Government has tried to bring about increased production in all possible ways. Measures adopted are the transferring of workers to mines, assigning troops to temporary duty in mines, special food rationing for miners, publicizing special wage policies to miners, stressing a press campaign on the importance of coal production in the national economy, and praising special accomplishments of individual miners. Production has been handicapped by the continued deportation of German miners and the shortage of Czechoslovak miners. Some 20 percent of the remaining black-coal miners and 50 percent of the brown-coal miners are German, and it has been reported that deportation has been halted for the present.

Production of both bituminous and lignite (brown coal) increased every month after liberation until January 1946, reaching 1,226,000 and 1,679,000 metric tons, respectively, or 86.7 percent and 112.6 percent of the 1937 monthly average. However, the 1937 total of 34,673,000 tons was only about two-thirds of full capacity, because the miners were only working about an average of 4.5 days per week. In February 1946

the Minister of Foreign Trade reported that 1937 output would be equaled, but from January to July 1946 production gradually declined in spite of all efforts and in August was just about equal to that of January 1946.

The Deputy Director of the coal industry cites a few of the factors which have interfered with the fuel situation:

1. "Black coal production, with a higher caloric value than brown coal, has declined, but there is some offset in the increased output of brown coal.

2. "Locomotives have had to turn to the inferior brown coal, resulting in decreased efficiency and increased tonnage consumption of coal."

Some of these deterrents and reduced efficiencies may be traced to the disorganization due to the war. The efficiency of the miners is low, and there is a tendency to "take it easy" now that the war is over.

In 1937 there were about 73,000 miners (table 1), whereas today the number is about 106,000, of which about one-third are Germans. Efficiency is about 25 to 30 percent below the prewar level.

Table 1. - Number of coal miners and production of coal in Czechoslovakia, specified years, 1913-46

Year	:	Employees in coal mines Number	:	Production of coal	
				Black	Brown
				Metric tons 1/	Metric tons 1/
1913	:	97,601	:	14,087	23,137
1919	:	110,529	:	10,254	17,234
1920	:	130,001	:	11,375	19,957
1921	:	131,086	:	12,023	21,335
1922	:	121,514	:	10,465	19,174
1923	:	113,102	:	12,347	16,266
1924	:	113,374	:	15,179	20,460
1929	:	99,418	:	16,521	22,561
1933	:	78,450	:	10,532	15,063
1937	:	73,153	:	16,777	17,895
1946	:	2/103,694	:	3/ 1,226	3/ 1,679

1. 1 metric ton equals 1.1 short ton of 2,000 pounds.

2. In May.

3. January only.

From the figures reported (table 1), it is apparent that 15 months after liberation, 25 percent more miners were producing 20 percent less coal than was produced in a 4.5-day week in 1937.

TRANSPORTATION

Cotton destined for Czechoslovakia is now being routed usually through Antwerp, Rotterdam, or Trieste. The railroads have made a creditable recovery since liberation in face of a shortage of rolling stock and locomotives, resulting from confiscations by the Germans and Hungarians, and of heavy destruction of bridges, tunnels, and tracks, mainly in Slovakia. Since liberation, and especially in the last 3 months of 1946, UNRRA deliveries of new locomotives and freight cars and repairs on bridges and tunnels have done much to restore railway service. Highway transportation is fair, but there is a shortage of cars and trucks.

There is considerable confusion, with many claims and counter-claims and the scattering of railroad equipment into adjacent countries; but it is believed that transportation facilities will be able to handle the essential movement of goods, raw materials, cotton, etc.

NATIONALIZATION

The Czechoslovak national political policy in effect since liberation has brought about the transfer of much of the industry of the country from private ownership to state control. The larger industrial firms, employing 61 percent of all workers, are included. It is reported that this includes about 80 percent of all spinning mills and 25 to 50 percent of all weaving mills.

A declaration has been made that "no additional enterprises would be nationalized regardless of future growth." However, the Government can control the allocation of raw materials, labor, etc., and thus limit, direct, or control the growth, or operation, of smaller concerns.

Many of the national administrators, particularly in the heavy industries, are members of the political party now in power and are not so experienced in practical business operations as were the original managers or owners. Many of their deputies, however, have had wide business training.

The over-all policy of nationalization is one of standardization, consolidation, and elimination, as follows:

1. Standardization on fewer production items, motor cars, textiles, etc.

2. Consolidation of factories into larger combines, steel, coal, textiles, etc.

3. Elimination, or the incorporation of smaller or marginal plants into the more profitable enterprises and to make possible the transfer of workers to the more essential or larger units.

According to report, the industrial life of the Province of Slovakia is to be revitalized by the transfer of many industrial plants from the Sudetenland. Previously, this area was undeveloped industrially.

SYNTHETICS

From the standpoint of total volume, or competition with cotton, the production of synthetic fibers in Czechoslovakia was relatively unimportant before the war, and there has been no material change since liberation. It has been estimated that production in the immediate future may eventually reach 10,000 metric tons, all by the viscose process. Under the 2-year plan for 1947 and 1948, it is hoped to increase production to 25,000 or 30,000 tons. Based on present capacity, which is estimated at about 5,000 tons annually, this program may be optimistic.

While there are some domestic supplies of wood pulp in Slovakia, any substantial expansion would involve large credits for costly machinery and production and imports of chemicals, wood pulp, or cellulose. The movement of these materials would also increase the problem of transportation. It is also probable that technical engineers or other experts would be required.

Only rayon staple fiber is to be produced at present. According to present plans, this would not be mixed with cotton but would be spun separately. In any case, less equipment would be available for processing cotton because both staple fiber and cotton generally use the same machinery.



